

REMARKS

In response to the Official Action of March 1, 2006, claim 53 has been amended in a manner which is believed to particularly point out and distinctly claim the invention and which distinguishes the invention over the cited art. In particular, claim 53 has been amended to particularly point out and claim that each separate conductive line completely fills a groove. Support for this amendment is found in the application as filed, including Figures 1 and 2, page 12, lines 11-12, and page 15, lines 18-20.

More particularly, referring now to paragraph 2 of the Official Action, claims 53, 57, 58 and 59 are rejected under 35 U.S.C. §103(a) as unpatentable in view of US patent 6,845,184, Yoshimura et al (hereinafter Yoshimura) in view of US patent 6,266,249, Desai et al (hereinafter Desai).

With regard to Yoshimura, reference is particularly directed to Figure 51-2 and associated cladding layer (23), core layer (24) and cladding layer (21). In addition, cuts (456) in these layers are referenced, as well as mirror structure (458) which as seen in Figure 51-2 is positioned within cut (456).

It should be noted that Yoshimura is directed to opto-electrical systems having electrical and optical interconnections (see abstract of Yoshimura). Further, what is called a layer (458) in the Official Action is, as noted above, set forth in Yoshimura as a mirror structure (see column 46, lines 2-5). This layer of reflective metal forming a mirror is deposited over the bevelled edges left by the outward laser cuts (456) (see columns 44, lines 40-42).

Thus, Yoshimura is directed to forming mirror elements on the bevels of the inward cuts as shown in Figure 51-2. It is respectfully submitted that Yoshimura does not disclose or suggest that this reflective metal forms a conductive line for electrical connection to the electrical component as required by claim 53.

Furthermore, the reflective material in Yoshimura (which is also referred to as a mirror structure – see column 46, lines 2-5) is formed in the groove sidewall rather than throughout

the entire groove so as to fill the groove. Claim 53, as amended, makes clear that the electronic component further comprises grooves provided in the front surface of the substrate, wherein each separate conductive line completely fills a groove.

Thus, the conductive lines are formed to entirely fill the grooves of the present invention, totally unlike the mirror structure (458) deposited on the side of the laser cut (456) (see Figure 51-2 of Yoshimura. Therefore, the present invention is distinguished over Yoshimura since the mirror structures (458) in Yoshimura do not act as conductive lines, are not suggested to act as conductive lines, and do not completely fill the grooves.

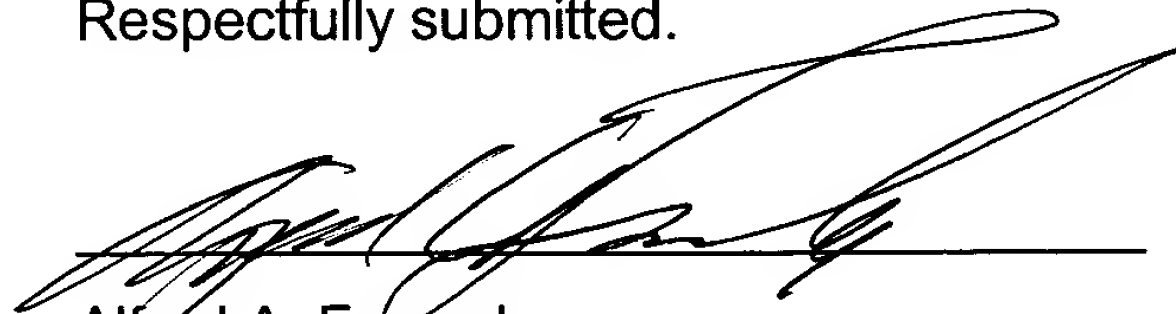
Desai does not make up for this deficiency in Yoshimura and, as a result, it is respectfully submitted that claim 53 is distinguished over the cited art. Desai is cited in the Official Action simply with respect to conductive vias.

Claims 54-59 all depend from claim 53 and are therefore believed to be further distinguished over the cited art.

It is therefore respectfully submitted that the present application as amended is in condition for allowance and such action is earnestly solicited.

The undersigned respectfully submits that no fee is due for filing this Amendment. The Commissioner is hereby authorized to charge to deposit account 23-0442 any fee deficiency required to submit this paper.

Respectfully submitted.



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